

REMARKS/ARGUMENTS

Specification

The Specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. Correction of the following is required: antecedent basis in the specification is needed for the ranges 1 to 1,000,000 and 100 to 10,000 as claims 23 and 24 respectively.

The following new paragraph is added after paragraph [00042]:

[0042.1] In a preferred embodiment, there are 1 to 1,000,000 different ligands on an array.
In another preferred embodiment, there are 100 to 10,000 different ligands on an array.

Claim Objections

In claim 20, line 2 “know” should be –known–

The error has been corrected (see Amendments to the Claims).

Claim Rejections under 35USC.112

A. Claim 20, it is unclear as to whether Applicant is claiming a method of biological assays or a method of making biological assays.

The preamble in claim 20 is changed to “method of detecting proteins” (see Amendments to the Claims).

B. Claim 20 recites the limitation of “the binding” in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 is amended. “the binding” is avoided.

C. Claim 20 is vague. The claim appears to be incomplete. An “and” should precede the last step of the method, otherwise, there appears to be additional steps missing.

Claim 20 is amended. An “and” is added.

D. Claim 21 recites the limitation “said support” in line 1. There is insufficient antecedent basis for this limitation in the claim. (It appears that Applicant intended to mean “said solid support”, however this should be clarified.

It has been changed to “said solid support”.

Claim Rejections under 35USC.102

Claim 20 and 22-24 are rejected as being anticipated by Lizardi et al., 6,316,229.

The Applicant respectfully disagrees with the Examiner on this. Lizardi et al. discloses a method of immobilizing a plurality of ligands on a solid support and the use of cross-linking. However, the cross-linking is between the ligands and the solid support (referred to as substrate in Lizardi et al.). This is different from what is disclosed in the present invention in which cross-linking is between the ligands and the proteins (the ligands and the proteins are not the cross-linker).

Claim Rejections under 35USC.103

Claim 21 is rejected as being unpatentable over Lizardi et al., 6,316,229, in view of Schwarz et al., 5,502,022.

As argued above, Claim 20 cannot be anticipated by Lizardi et al. Schwarz et al. teaches a solid support of 1 mm in thickness, it did not teach the method in Claim 20, no the method in the dependent Claim 21. Therefore, the methods of Claim 20 and 21 are not obvious in view of Schwarz et al.

Others

New Claims 30-35 are added to recite additional features of the method of Claim 20.

These features are disclosed in the Specification.

Claims 1-19 and Claims 25-29 have been withdrawn as the result of an earlier restriction requirement. Applicant retains the right to present the withdrawn claims in a divisional application.

In summary, each of the Examiner's objections and rejections has been addressed.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,


Yingjian Wang

(508) 856-7900